OIPE JC10
JAN 26 2004
PATENT & TRADEMARK OFFICE

FIG. 1

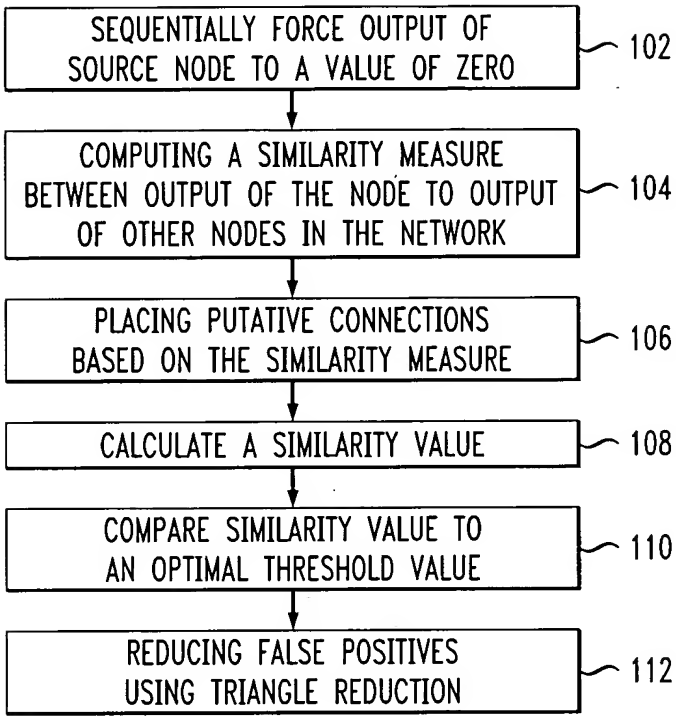


FIG. 2

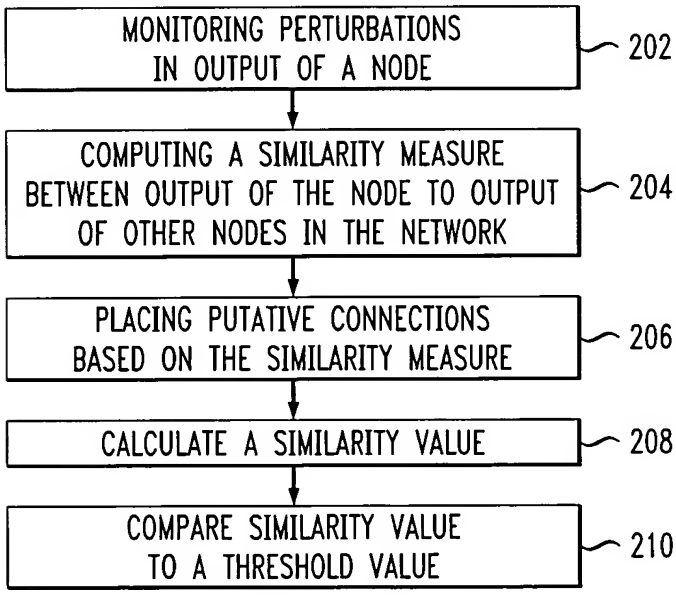


FIG. 3

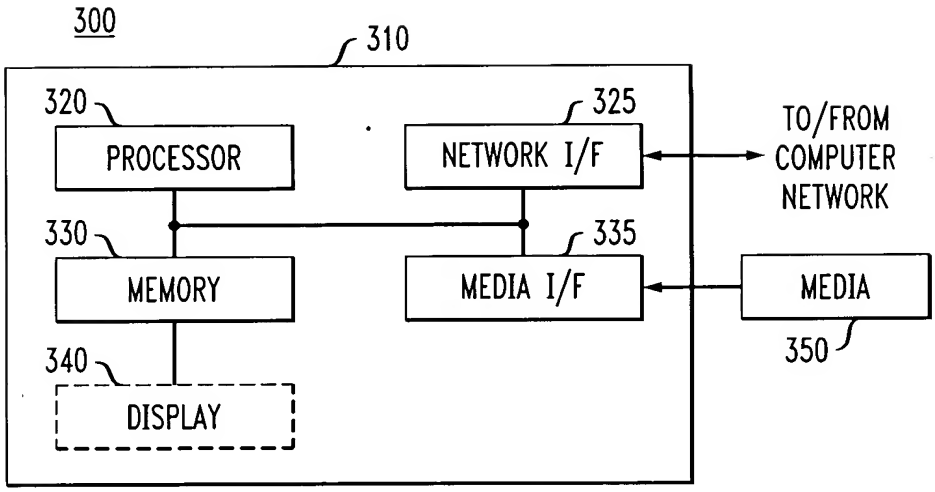

300
310
320
PROCESSOR
325
NETWORK I/F
TO/FROM
COMPUTER
NETWORK
330
MEMORY
335
MEDIA I/F
MEDIA
350
340
DISPLAY

FIG. 4A

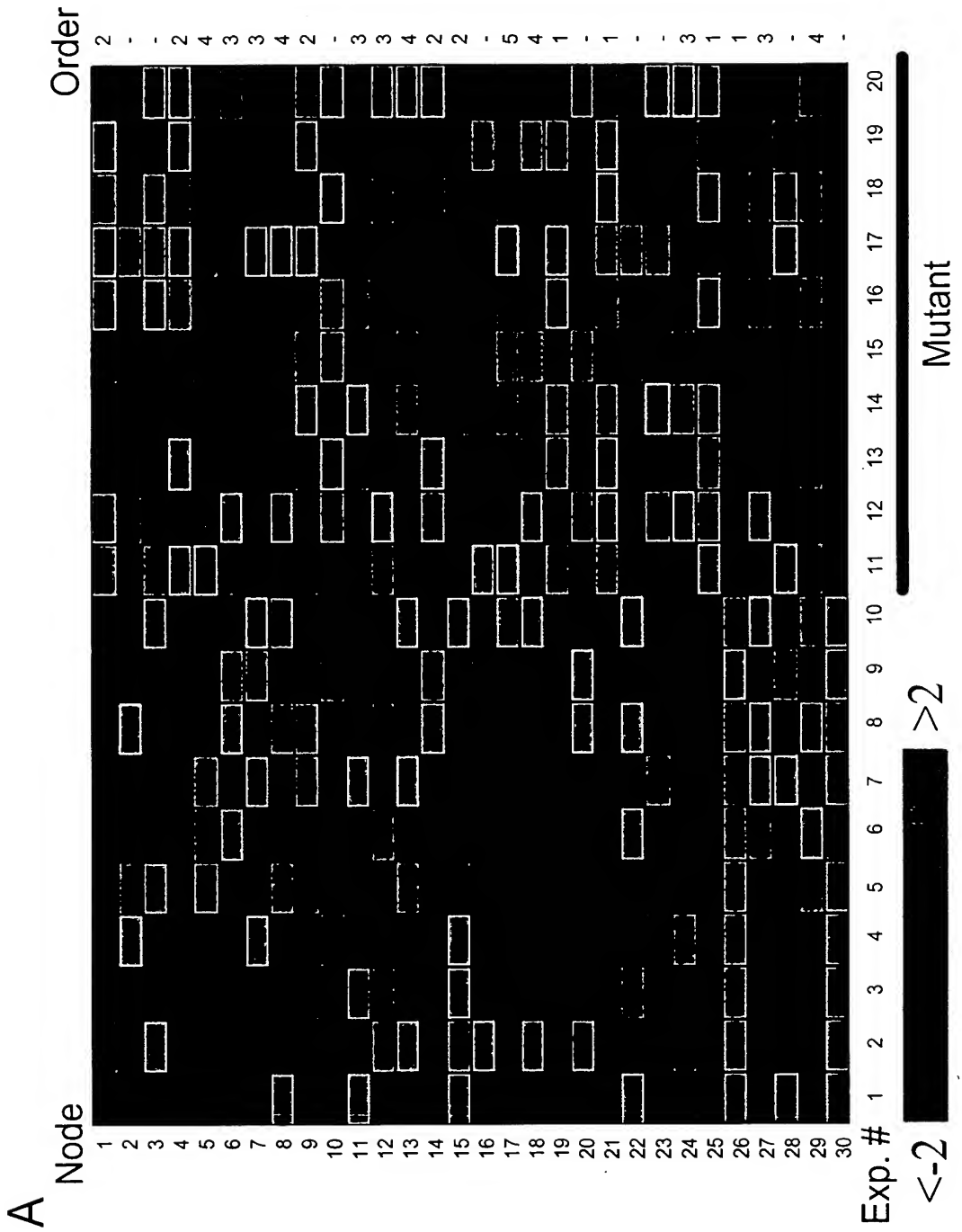


FIG. 4B

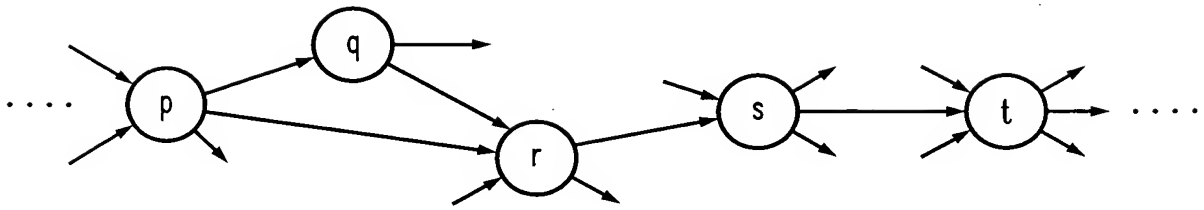

q
p
r
s
t

FIG. 5

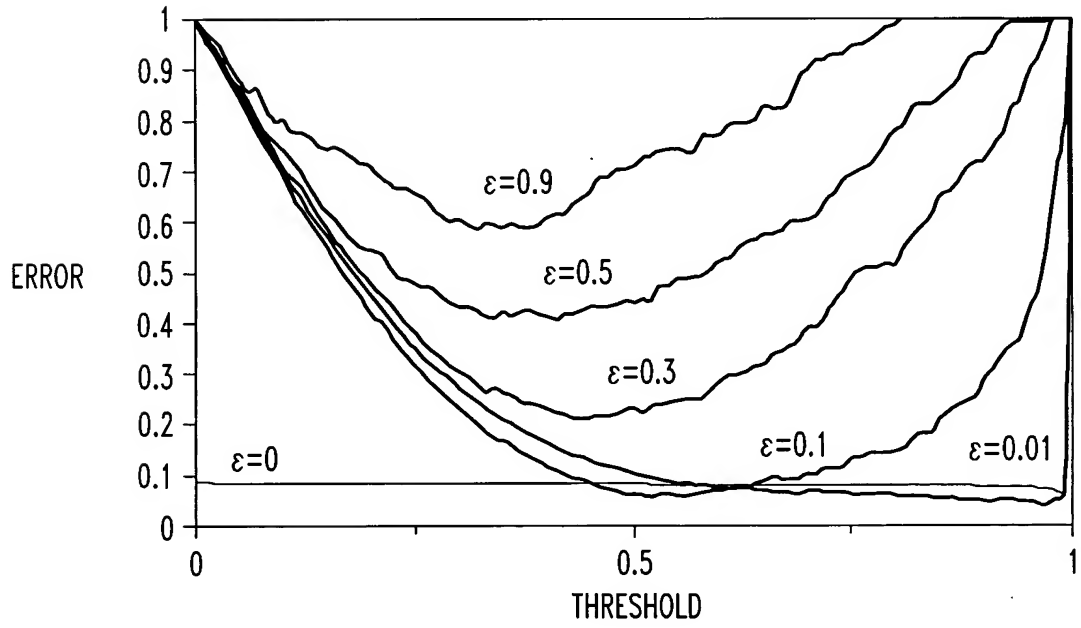

ERROR
1
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
ε=0.9
ε=0.5
ε=0.3
ε=0.1
ε=0.01
ε=0
0
0.5
1
THRESHOLD

FIG. 6A

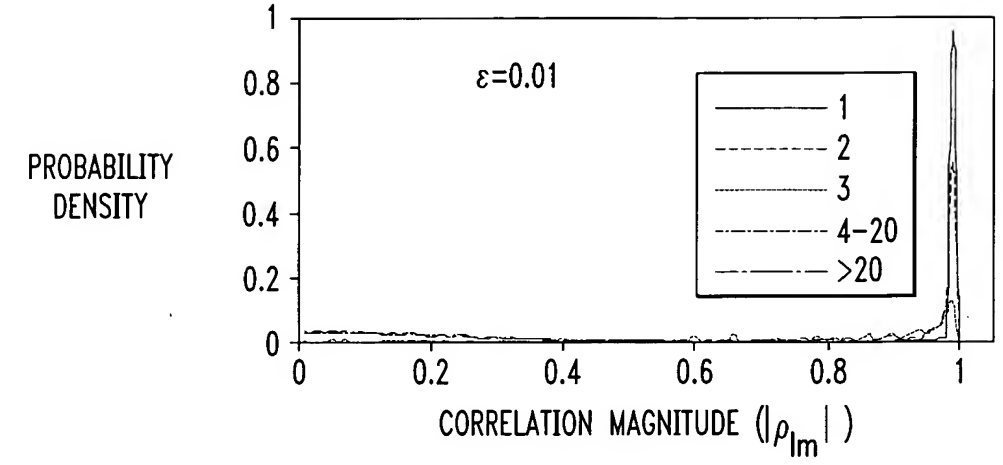


FIG. 6B

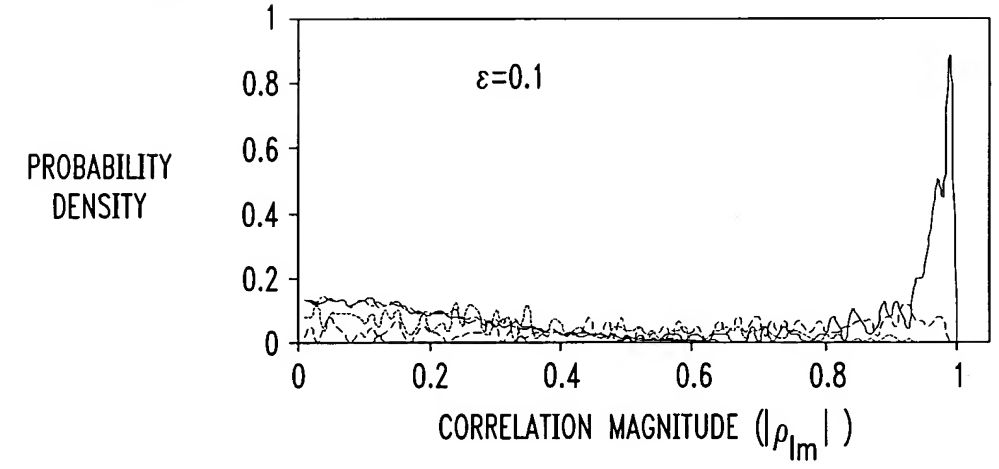


FIG. 6C

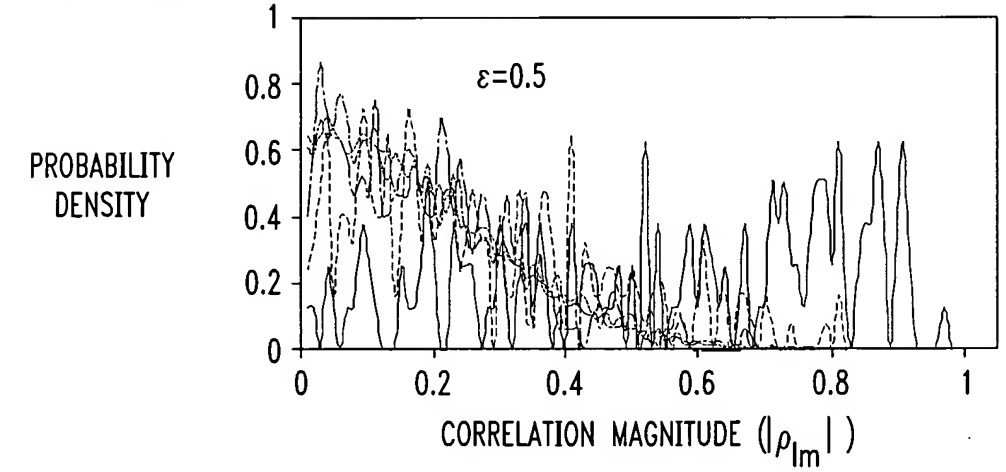


FIG. 7A

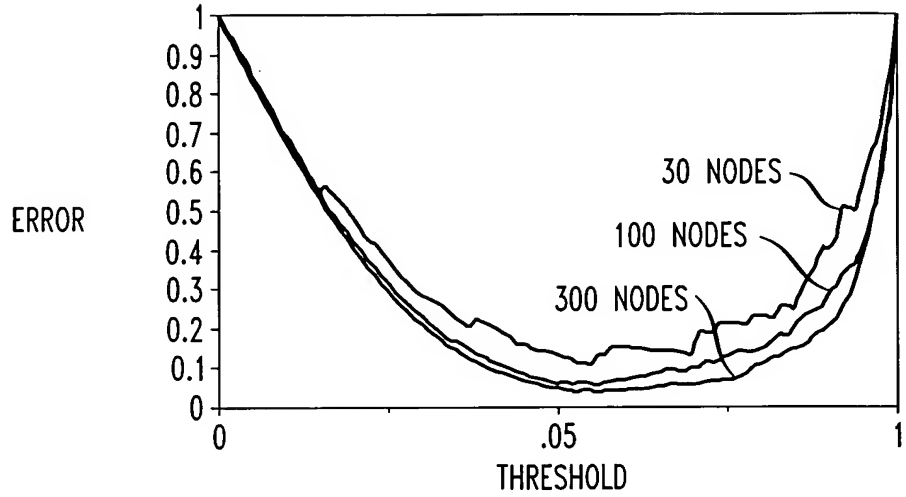


FIG. 7B

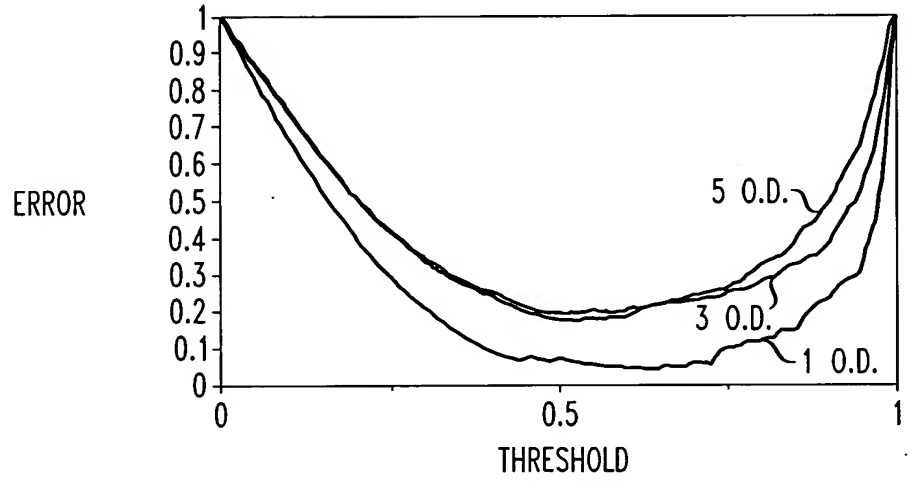


FIG. 7C

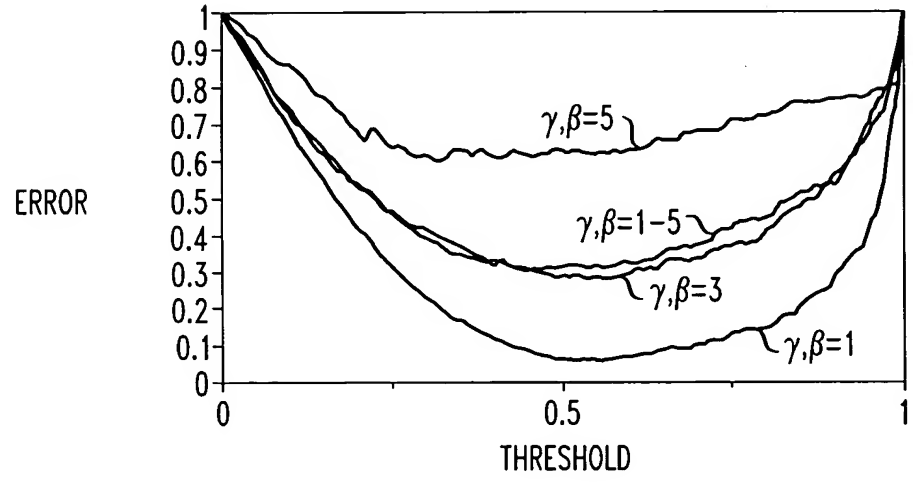


FIG. 8

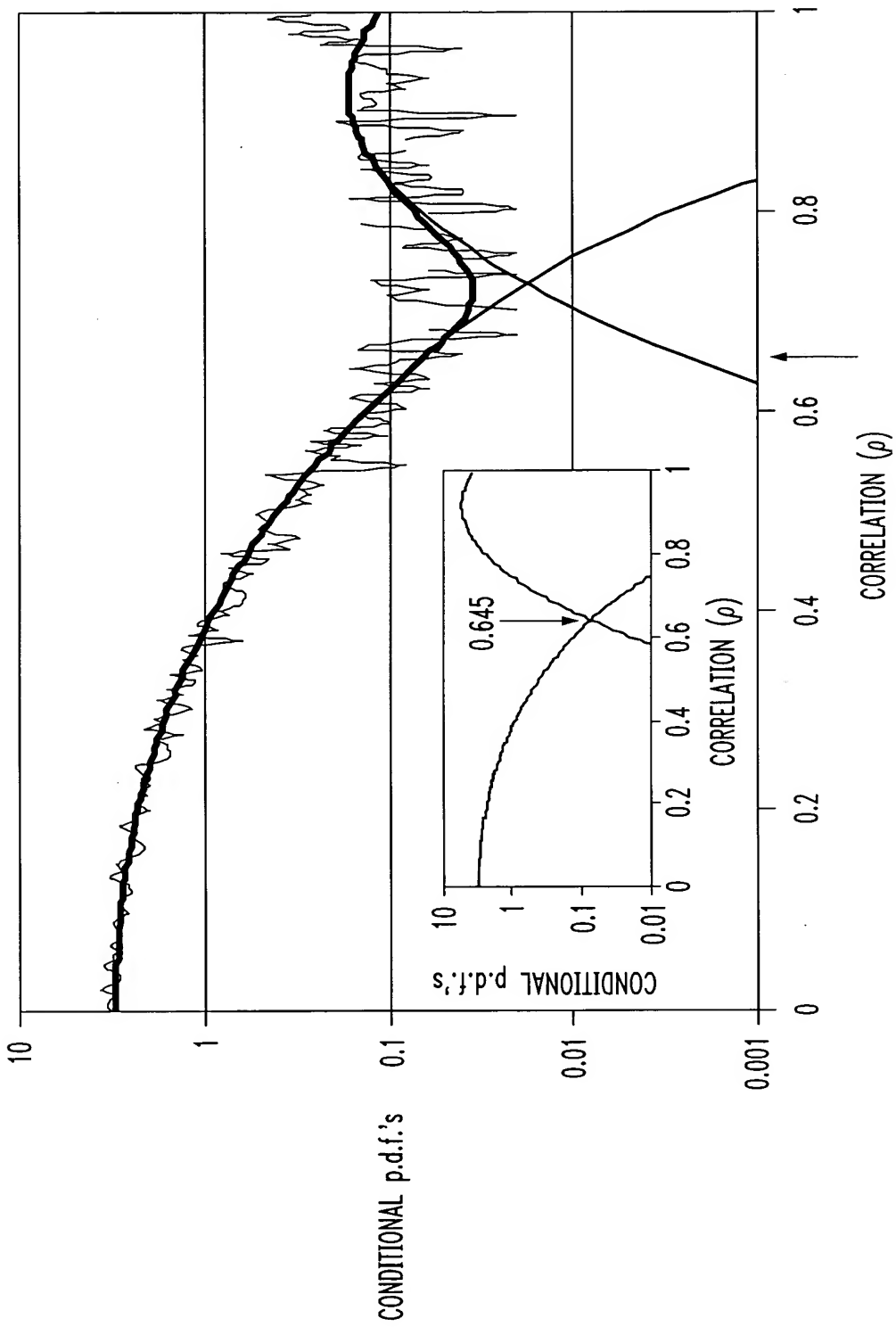

CONDITIONAL p.d.f.'s
10
1
0.1
0.01
0.001
0
0.2
0.4
0.6
0.8
1
CORRELATION (ρ)
0.645
CONDITIONAL p.d.f.'s
10
1
0.1
0.01
0
0.2
0.4
0.6
0.8
1
CORRELATION (ρ)

FIG. 9A

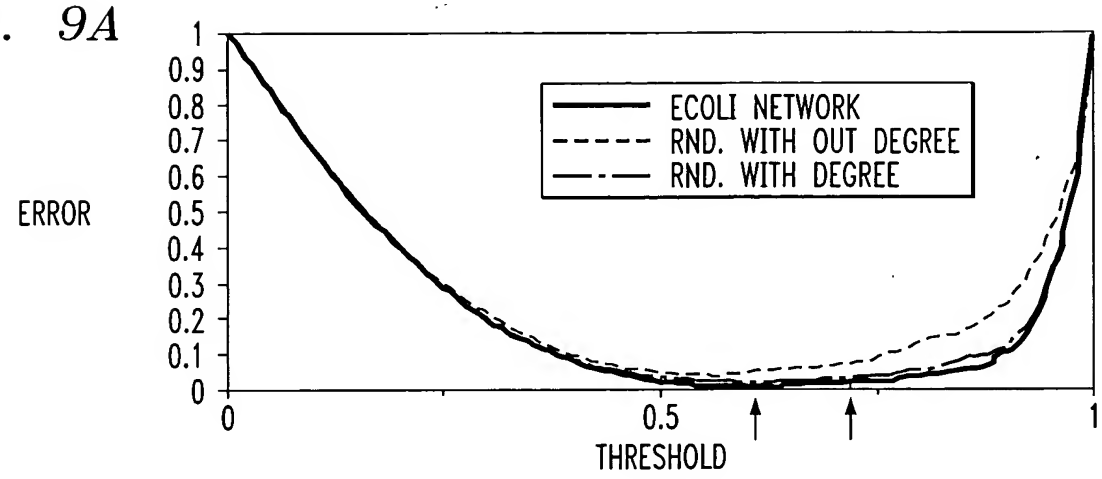


FIG. 9B

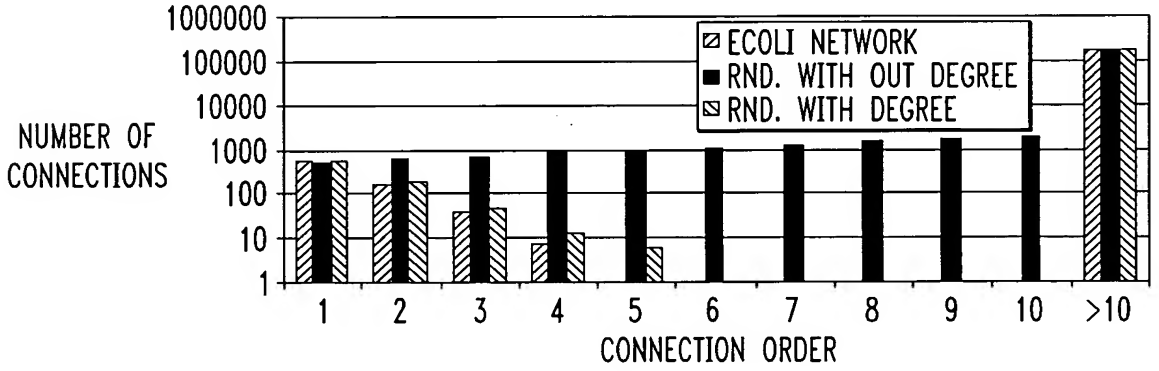


FIG. 9C

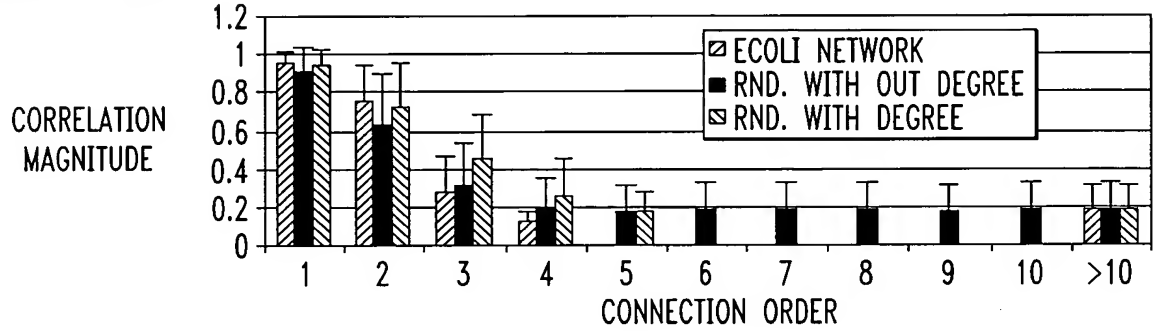


FIG. 9D

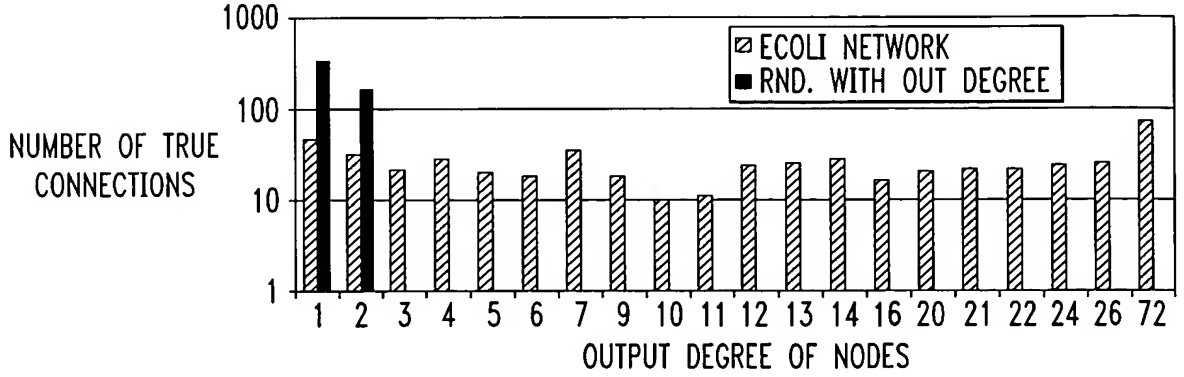


FIG. 10A

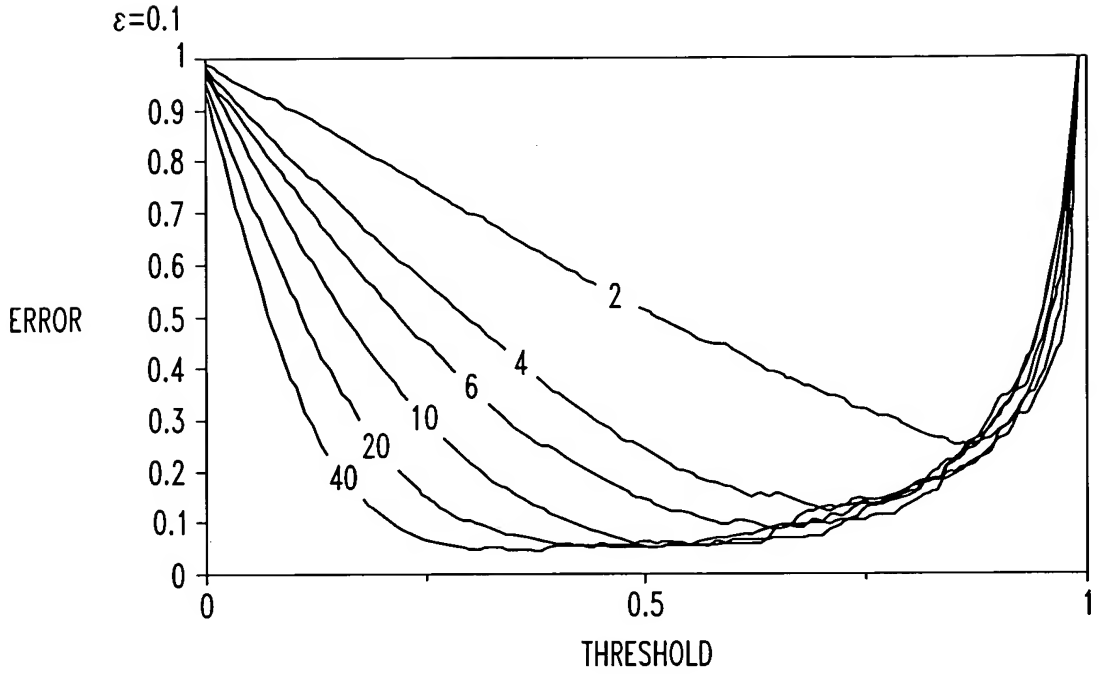


FIG. 10B

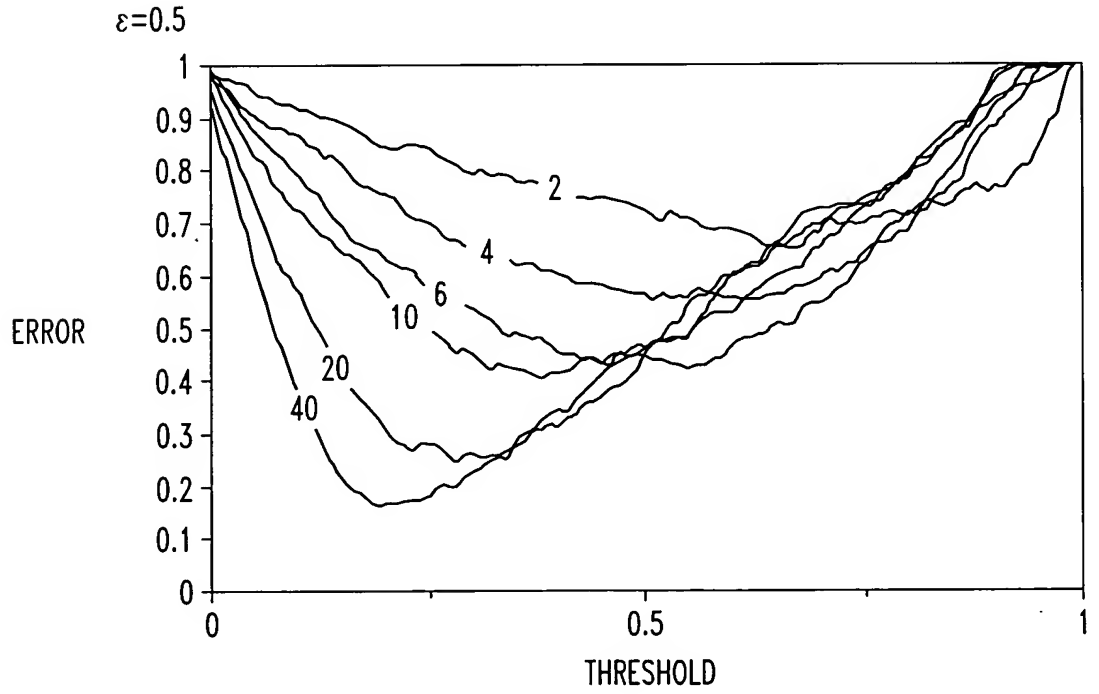


FIG. 11A

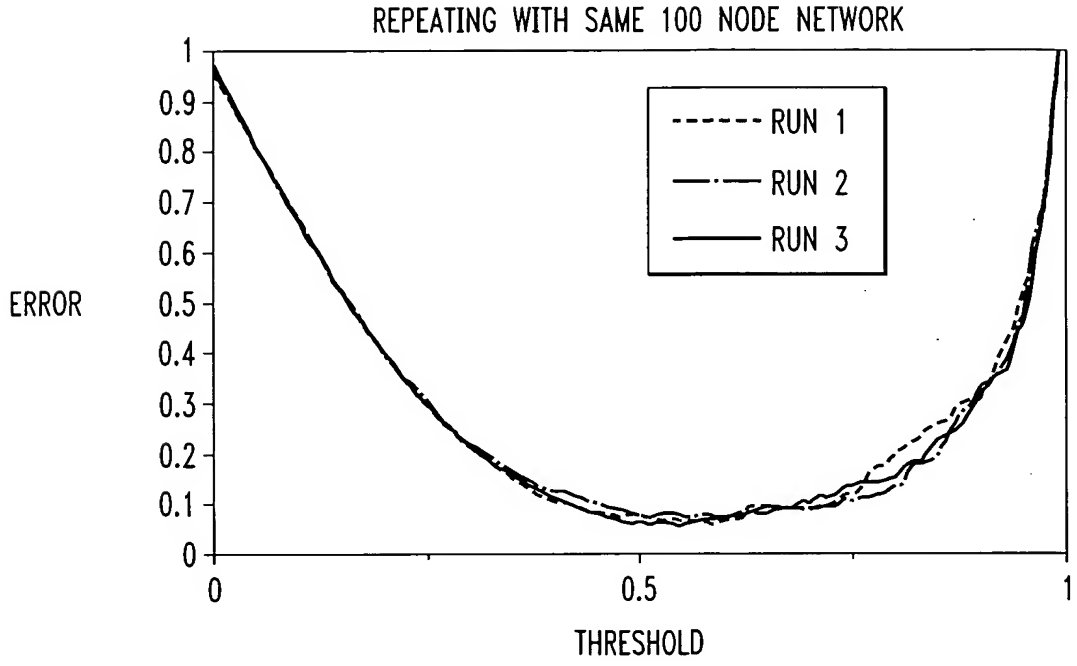
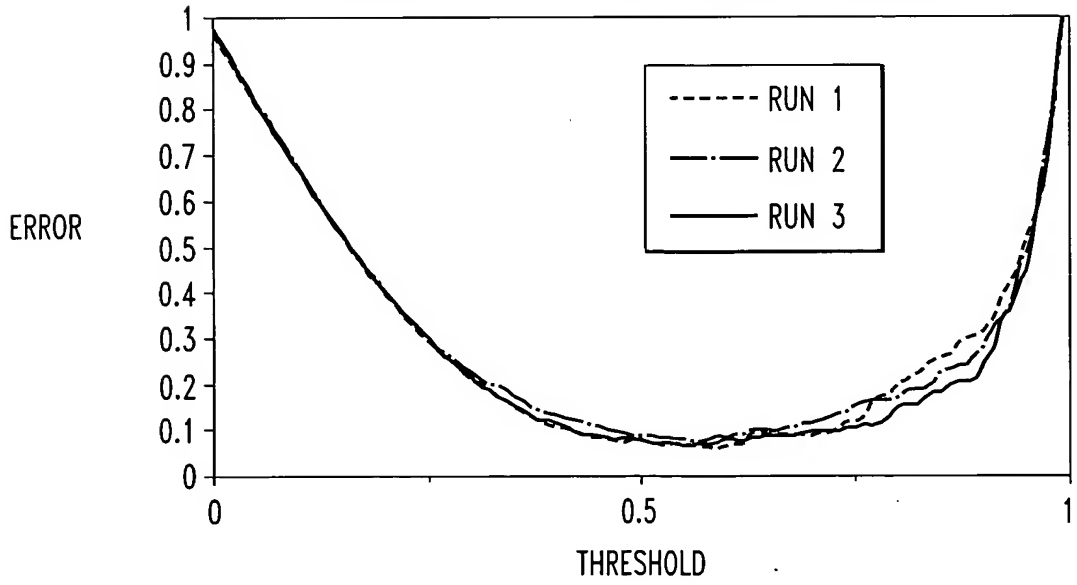


FIG. 11B



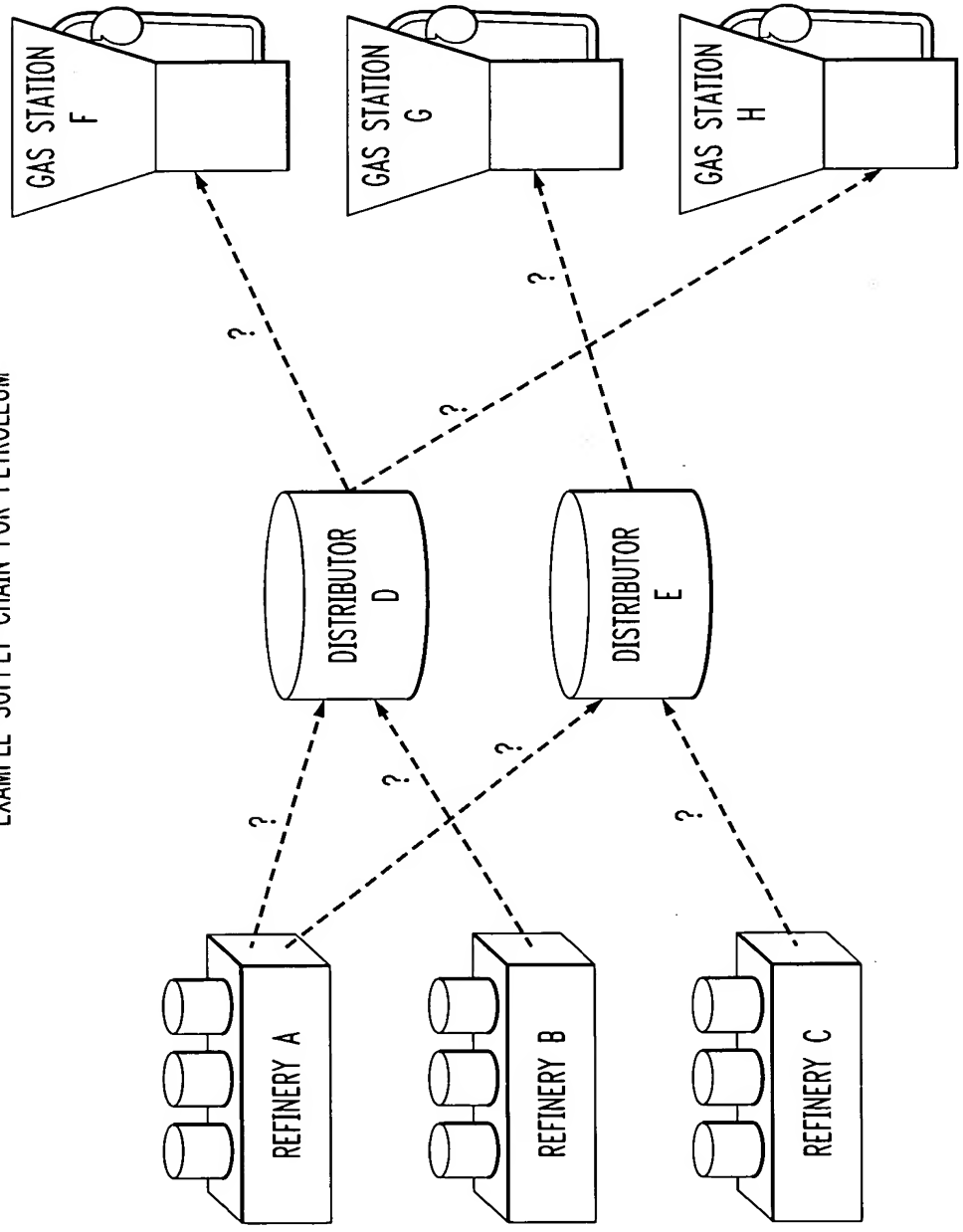


FIG. 12

EXAMPLE SUPPLY CHAIN FOR PETROLEUM

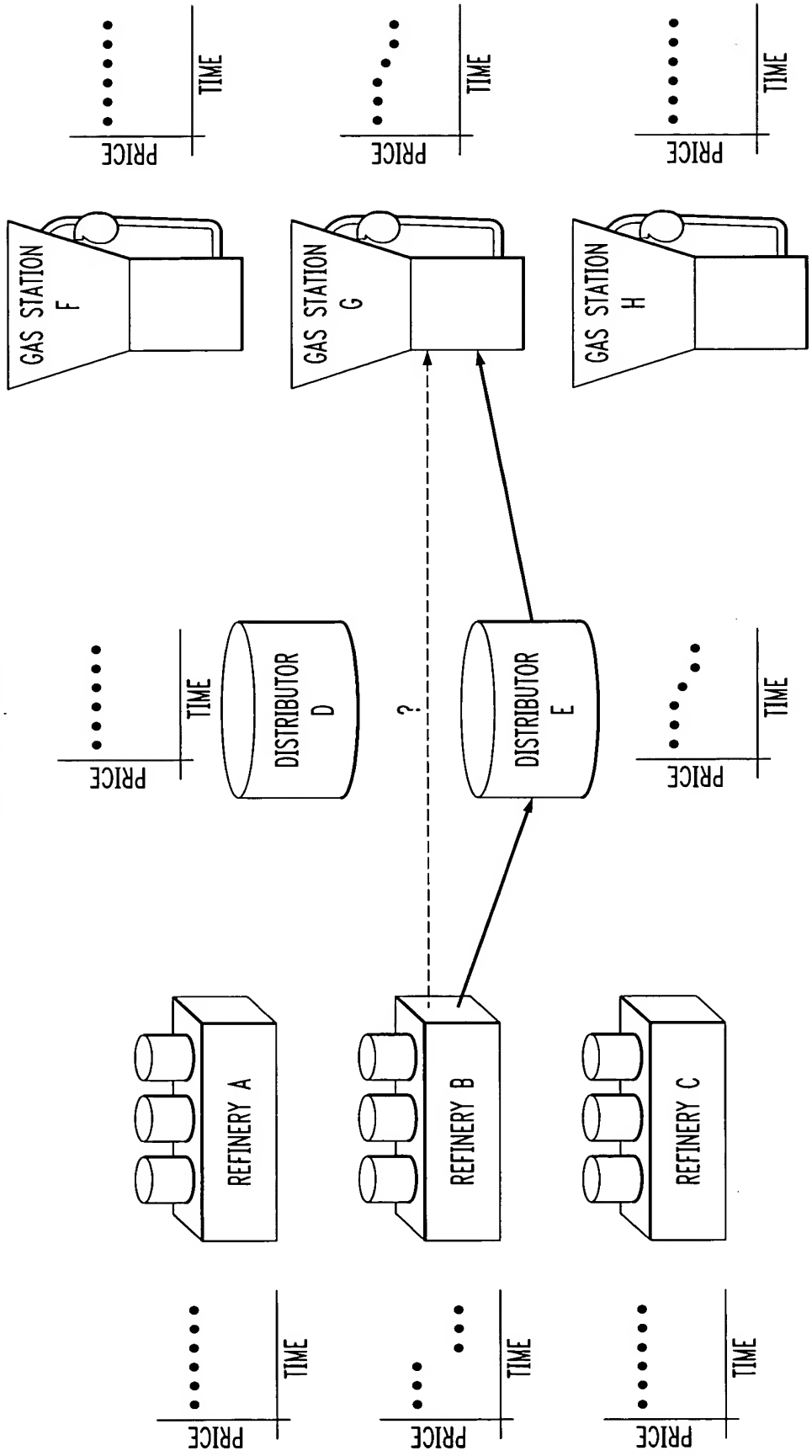


FIG. 13

EXAMPLE OF RECONSTRUCTION USING PAIR-WISE CORRELATION INFERENCE